



Supported Cisco Switches

This section lists all supported Cisco switches:

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- [Cisco Catalyst 6500 Series Switches, page 105](#)
- [Cisco ME 3400 Series Ethernet Access Switches, page 114](#)
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Cisco Catalyst 2950 Series Switches

This section contains:

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- [Supported Topologies for Cisco Catalyst 2950 Series Switches, page 96](#)
- [Supported Network Resource Management Components for Cisco Catalyst 2950 Series Switches, page 97](#)

Supported Network Elements for Cisco Catalyst 2950 Series Switches

Table 95 *Supported Network Element for Cisco Catalyst 2950 Series Switches*

Device Type	sysObjectID
WS-C2950-12	.1.3.6.1.4.1.9.1.323
WS-C2950-12-EI	.1.3.6.1.4.1.9.1.323
WS-C2950-24	.1.3.6.1.4.1.9.1.324
WS-C2950-24-EI	.1.3.6.1.4.1.9.1.324

Table 95 Supported Network Element for Cisco Catalyst 2950 Series Switches (continued)

Device Type	sysObjectID
WS-C2950-24-EI-DC	.1.3.6.1.4.1.9.1.472
WS-C2950-48-EI	.1.3.6.1.4.1.9.1.429
WS-C2950C-24	.1.3.6.1.4.1.9.1.325
WS-C2950ST-24-LRE	.1.3.6.1.4.1.9.1.482
WS-C2950ST-8-LRE	.1.3.6.1.4.1.9.1.483
WS-C2950SX-24	.1.3.6.1.4.1.9.1.480
WS-C2950SX-48-SI	.1.3.6.1.4.1.9.1.560
WS-C2950T-24	.1.3.6.1.4.1.9.1.359
WS-C2950T-48-SI	.1.3.6.1.4.1.9.1.559

Supported Software Version for Cisco Catalyst 2950 Series Switches

Table 96 Supported Software Version for Cisco Catalyst 2950 Series Switches

Software Version	Support Available In
IOS 12.1(22)	Cisco ANA 4.0 and later.

Supported Modules for Cisco Catalyst 2950 Series Switches

Table 97 Supported Modules for Cisco Catalyst 2950 Series Switches

Part Number	Support Available In
Cisco 2950 board	Cisco ANA 4.0 and later
GBIC (Gigabit Interface Converter) Modules	Cisco ANA 4.0 and later
SFP (Small Form-factor Pluggable) Modules	Cisco ANA 4.0 and later

Supported Technologies on Cisco Catalyst 2950 Series Switches

The following technologies are supported:

Technologies	Schemes
ARP	Foundation
Bridging	Foundation
Ethernet	Foundation
Ethernet Channel	Foundation
IEEE dot1q	Foundation
IP	Foundation

For detailed support on the technologies, see [Cisco Active Network Abstraction VNE Reference—Addendum](#) on Cisco.com.

Supported Service Alarms for Cisco Catalyst 2950 Series Switches

Table 98 **Supported Alarms for Cisco Catalyst 2950 Series Switches**

Technologies	Event Name	Supported	Support Added In	Expedited
Ethernet	Link Down	Yes	Cisco ANA 4.0	No
Ethernet	Port Down	Yes	Cisco ANA 4.0	No
Ethernet	Port Flapping	Yes	Cisco ANA 4.0	No
Ethernet	Interface Status	Yes	Cisco ANA 4.0	No
Physical and Logical Equipment	Component Unreachable	Yes	Cisco ANA 4.0	No
MPLS	MPLS TE Tunnel Down	No	N/A	N/A
MPLS Pseudowire	VC Up/VC Down	No	N/A	N/A
Base Logical Component	CPU Overutilized	Yes	Cisco ANA 4.0	No
Base Logical Component	Memory Overutilized	Yes	Cisco ANA 4.0	No
Routing Protocols	BGP Neighbor Loss	Yes	Cisco ANA 4.0	No

Supported Topologies for Cisco Catalyst 2950 Series Switches

Table 99 *Supported Topologies for Cisco Catalyst 2950 Series*

Topology Type	Topology Discovery Technique	Topology Verification Technique	Additional Information
Physical Layer	CDP	CDP	The portS are tested on separate VNEs by checking the VNE management IP. CDP (Cisco Discovery Protocol) includes any upper-layer techniques, such as MAC in Ethernet. In this technique the matching criteria is the CDP neighboring information.
Physical Layer	Static	—	You can create a static link between managed network elements by selecting the two end ports of the network elements. To create a static topological link, select the exact location of the two end ports (at both ends of the link). For information on creating a Static link, see <i>Cisco Active Network Abstraction 4.0.2 User and Administration Guide</i> on Cisco.com: http://www.cisco.com/en/US/products/ps6776/products_user_guide_list.html
Ethernet	MAC address	Ethernet counters	<ul style="list-style-type: none"> • MAC: Ethernet port MAC is determined using bridge and ARP tables. This technique discovers links between routers and links between router and switch. It does not discover links between switches. • Ethernet Counters: Based on the unicast packets traffic signature.
MPLS	Not supported	Not supported	—
BGP	Not supported	Not supported	—
VPN (VRF)	Not supported	Not supported	—
Tunnel	Not supported	Not supported	—

Supported Network Resource Management Components for Cisco Catalyst 2950 Series Switches

The following Network Resource Management components support Cisco Catalyst 2950 Series Switches:

- [Supported Protocols for Configuration Archive](#)
- [Supported Protocols for Network Element Image Management](#)

Supported Protocols for Configuration Archive

Table 100 *Supported Protocols for Configuration Archive for Cisco Catalyst 2950 Series*

Functionality	SNMP	Telnet
When request is from VNE		
Fetching running configuration	No	Yes
Fetching running configuration timestamp	Yes	No
Fetching startup configuration timestamp	Yes	No
Fetching VLAN ¹ configuration timestamp	No	Yes
When request is from Configuration Archive application		
Fetching the running and startup configuration	Yes	No
Deploying the running and startup configuration	Yes	No
Fetching the VLAN ¹ configuration	No	Yes
Deploying the VLAN ¹ configuration	No	Yes

1. Supported only for IOS image.

Supported Protocols for Network Element Image Management

Table 101 *Supported Protocols for NEIM for Cisco Catalyst 2950 Series*

Functionality	SNMP	Telnet
Image analysis and verification	Yes	No
Image distribution	Yes	No
Image activation	No	Yes

Cisco Catalyst 3550 Series Switches

This section contains:

- [Supported Network Element for Cisco Catalyst 3550 Series Switches](#)
- [Supported Software Version for Cisco Catalyst 3550 Series Switches](#)
- [Supported Modules for Cisco Catalyst 3550 Series Switches](#)
- [Supported Technologies on Cisco Catalyst 3550 Series Switches](#)

- [Supported Service Alarms for Cisco Catalyst 3550 Series Switches](#)
- [Supported Topologies for Cisco Catalyst 3550 Series Switches](#)
- [Supported Network Resource Management Components for Cisco Catalyst 3550 Series Switches](#)

Supported Network Element for Cisco Catalyst 3550 Series Switches

Table 102 *Supported Network Element for Cisco Catalyst 3550 Series Switches*

Device Type	sysObjectID
WS-C3550-12G	.1.3.6.1.4.1.9.1.431
WS-C3550-12T	.1.3.6.1.4.1.9.1.368
WS-C3550-24-DC-SMI	.1.3.6.1.4.1.9.1.452
WS-C3550-24-EMI	.1.3.6.1.4.1.9.1.366
WS-C3550-24-FX-SMI	.1.3.6.1.4.1.9.1.366
WS-C3550-24PWR-EMI	.1.3.6.1.4.1.9.1.485
WS-C3550-24PWR-SMI	.1.3.6.1.4.1.9.1.485
WS-C3550-24-SMI	.1.3.6.1.4.1.9.1.366
WS-C3550-48-EMI	.1.3.6.1.4.1.9.1.367
WS-C3550-48-SMI	.1.3.6.1.4.1.9.1.367

Supported Software Version for Cisco Catalyst 3550 Series Switches

Table 103 *Supported Software Version for Cisco Catalyst 3550 Series Switches*

Software Version	Support Available In
12.2(25)S	Cisco ANA 4.0 and later
12.2(25)SE	Cisco ANA 4.0 and later
12.2(25)SEA	Cisco ANA 4.0 and later
12.2(25)SEB	Cisco ANA 4.0 and later
12.2(25)SEC	Cisco ANA 4.0 and later
12.2(25)SED	Cisco ANA 4.0 and later
12.2(25)SEE	Cisco ANA 4.0 and later
12.1(13)EA1c	Cisco ANA 4.0.2 and later

Supported Modules for Cisco Catalyst 3550 Series Switches

Table 104 *Supported Modules for Cisco Catalyst 3550 Series Switches*

Part Number	Support Available In
GBIC (Gigabit Interface Converter) Modules	Cisco ANA 4.0 and later

Supported Technologies on Cisco Catalyst 3550 Series Switches

The following technologies are supported:

Technologies	Schemes
ARP	Foundation
Bridging	Foundation
Ethernet	Foundation
Ethernet Channel	Foundation
IEEE dot1q	Foundation
IP	Foundation
Carrier Ethernet	Foundation

For detailed support on the technologies, see [Cisco Active Network Abstraction VNE Reference—Addendum](#) on Cisco.com.

Supported Service Alarms for Cisco Catalyst 3550 Series Switches

Table 105 *Supported Alarms for Cisco Catalyst 3550 Series Switches*

Technologies	Event Name	Supported	Support Added In	Expedited
Ethernet	Link Down	Yes	Cisco ANA 4.0	No
Ethernet	Port Down	Yes	Cisco ANA 4.0	No
Ethernet	Port Flapping	Yes	Cisco ANA 4.0	No
Ethernet	Interface Status	Yes	Cisco ANA 4.0	No
Physical and Logical Equipment	Component Unreachable	Yes	Cisco ANA 4.0	No
MPLS	MPLS TE Tunnel Down	No	N/A	N/A
MPLS Pseudowire	VC Up/VC Down	Yes	Cisco ANA 4.0.2	No
Base Logical Component	CPU Overutilized	Yes	Cisco ANA 4.0	No

Table 105 **Supported Alarms for Cisco Catalyst 3550 Series Switches (continued)**

Technologies	Event Name	Supported	Support Added In	Expedited
Base Logical Component	Memory Overutilized	Yes	Cisco ANA 4.0	No
Routing Protocols	BGP Neighbor Loss	Yes	Cisco ANA 4.0	No

Supported Topologies for Cisco Catalyst 3550 Series Switches

Table 106 **Supported Topologies for Cisco Catalyst 3550 Series**

Topology Type	Topology Discovery Technique	Topology Verification Technique	Additional Information
Physical Layer	CDP	CDP	The ports are tested on separate VNEs by checking the VNE management IP. CDP (Cisco Discovery Protocol) includes any upper-layer techniques, such as MAC in Ethernet. In this technique the matching criteria is the CDP neighboring information.
Physical Layer	Static	—	You can create a static link between managed network elements by selecting the two end ports of the network elements. To create a static topological link, select the exact location of the two end ports (at both ends of the link). For information on creating a Static link, see <i>Cisco Active Network Abstraction 4.0.2 User and Administration Guide</i> on Cisco.com: http://www.cisco.com/en/US/products/ps6776/products_user_guide_list.html
Ethernet	MAC address	Ethernet counters	<ul style="list-style-type: none"> • MAC: Ethernet port MAC is determined using bridge and ARP tables. This technique discovers links between routers and links between router and switch. It does not discover links between switches. • Ethernet Counters: Based on the unicast packets traffic signature.
MPLS	Not supported	Not supported	—
BGP	Not supported	Not supported	—
VPN (VRF)	Not supported	Not supported	—
Tunnel	Not supported	Not supported	—

Supported Network Resource Management Components for Cisco Catalyst 3550 Series Switches

The following Network Resource Management components support Cisco Catalyst 3550 Series Switches:

- [Supported Protocols for Configuration Archive, page 101](#)
- [Supported Protocols for Network Element Image Management, page 101](#)

Supported Protocols for Configuration Archive

Table 107 *Supported Protocols for Configuration Archive for Cisco Catalyst 3550 Series*

Functionality	SNMP	Telnet
When request is from VNE		
Fetching running configuration	No	Yes
Fetching running configuration timestamp	Yes	No
Fetching startup configuration timestamp	Yes	No
Fetching VLAN ¹ configuration timestamp	No	Yes
When request is from Configuration Archive application		
Fetching the running and startup configuration	Yes	No
Deploying the running and startup configuration	Yes	No
Fetching the VLAN ¹ configuration	No	Yes
Deploying the VLAN ¹ configuration	No	Yes

1. Supported only for Cisco IOS image.

Supported Protocols for Network Element Image Management

Table 108 *Supported Protocols for NEIM for Cisco Catalyst 3550 Series*

Functionality	SNMP	Telnet
Image analysis and verification	Yes	No
Image distribution	Yes	No
Image activation	No	Yes

Cisco Catalyst 4500 Series Switches

This section contains:

- [Supported Network Element for Cisco Catalyst 4500 Series Switches, page 102](#)
- [Supported Software Version for Cisco Catalyst 4500 Series Switches, page 102](#)
- [Supported Modules for Cisco Catalyst 4500 Series Switches, page 102](#)
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- [Supported Topologies for Cisco Catalyst 4500 Series Switches](#), page 104
- [Supported Network Resource Management Components for Cisco Catalyst 4500 Series Switches](#), page 104

Supported Network Element for Cisco Catalyst 4500 Series Switches

Table 109 *Supported Network Element for Cisco Catalyst 4500 Series Switches*

Device Type	sysObjectID
cat4507	1.3.6.1.4.1.9.1.501

Supported Software Version for Cisco Catalyst 4500 Series Switches

Table 110 *Supported Software Version for Cisco Catalyst 4500 Series Switches*

Software Version	Support Available In
12.2(18)EW	Cisco ANA 4.0 and later.
12.2(25)EW	Cisco ANA 4.0 and later.
12.1(13)EW	Cisco ANA 4.0 and later.
12.1(19)EW	Cisco ANA 4.0 and later.

Supported Modules for Cisco Catalyst 4500 Series Switches

Table 111 *Supported Modules for Cisco Catalyst 4500 Series Switches*

Part Number	Support Available In	Description	Software Minimum Version	Software Recommended Version
PWR-C45-1400DC	Cisco ANA 4.0 and later	Catalyst 4500 series switch 1400 Watt DC triple input power supply (data-only)	12.2(25)EW	12.2(25)EWA8
PWR-C45-1400DC/2	Cisco ANA 4.0 and later	C4500 1400W DC Triple Input SP Power Supply-data only	12.2(25)EW	12.2(25)EWA8
WS-G5486	Cisco ANA 4.0 and later	1000BASE-LX/LH long-haul GBIC (single mode or multimode)	12.1(8a)EW	12.2(25)EWA8
WS-X4516-10GE	Cisco ANA 4.0 and later	4507R with Supervisor Engine V-10GE	12.2(25)EW	12.2(25)EWA8
WS-X4516-10GE/2	Cisco ANA 4.0 and later	Catalyst 45xxR Supervisor V-10GE,2x10GE (X2) and 4x1GE (SFP)	12.2(25)EW	12.2(25)EWA8
X2-10GB-LR	Cisco ANA 4.0 and later	10GBASE-LR X2 transceiver module for SMF, 1310-nm wavelength, SC duplex connector	12.2(25)EW	12.2(25)EWA8

Supported Technologies on Cisco Catalyst 4500 Series Switches

The following technologies are supported:

Technologies	Schemes
ARP	Foundation
Bridging	Foundation
Ethernet	Foundation
Ethernet Channel	Foundation
IEEE dot1q	Foundation
IP	Foundation
10 Giga Ethernet	Foundation
OSPF	Foundation
POS	Foundation
Carrier Ethernet	Foundation

For detailed support on the technologies, see [Cisco Active Network Abstraction VNE Reference—Addendum](#) on Cisco.com.

Supported Service Alarms for Cisco Catalyst 4500 Series Switches

Table 112 *Supported Alarms for Cisco Catalyst 4500 Series Switches*

Technologies	Event Name	Supported	Support Added In	Expedited
Ethernet	Link Down	Yes	Cisco ANA 4.0	No
Ethernet	Port Down	Yes	Cisco ANA 4.0	No
Ethernet	Port Flapping	Yes	Cisco ANA 4.0	No
Ethernet	Interface Status	Yes	Cisco ANA 4.0	No
Physical and Logical Equipment	Component Unreachable	Yes	Cisco ANA 4.0	No
MPLS	MPLS TE Tunnel Down	No	N/A	No
MPLS Pseudowire	VC Up/VC Down	Yes	Cisco ANA 4.0.2	No
Base Logical Component	CPU Overutilized	Yes	Cisco ANA 4.0	No
Base Logical Component	Memory Overutilized	Yes	Cisco ANA 4.0	No
Routing Protocols	BGP Neighbor Loss	Yes	Cisco ANA 4.0	No

Supported Topologies for Cisco Catalyst 4500 Series Switches

Table 113 *Supported Topologies for Cisco Catalyst 4500 Series*

Topology Type	Topology Discovery Technique	Topology Verification Technique	Additional Information
Physical Layer	CDP	CDP	The ports are tested on separate VNEs by checking the VNE management IP. CDP (Cisco Discovery Protocol) includes any upper-layer techniques, such as MAC in Ethernet. In this technique the matching criteria is the CDP neighboring information.
Physical Layer	Static	—	You can create a static link between managed network elements by selecting the two end ports of the network elements. To create a static topological link, select the exact location of the two end ports (at both ends of the link). For information on creating a Static link, see <i>Cisco Active Network Abstraction 4.0 User and Administration Guide</i> on Cisco.com: http://www.cisco.com/en/US/products/ps6776/products_user_guide_list.html
Ethernet	MAC address	Ethernet counters	<ul style="list-style-type: none"> • MAC: Ethernet port MAC is determined using bridge and ARP tables. This technique discovers links between routers and links between router and switch. It does not discover links between switches. • Ethernet Counters: Based on the unicast packets traffic signature.
MPLS	Not supported	Not supported	—
BGP	BGP information	BGP information	BGP information includes the local or remote BGP Identifier and autonomous system.
VPN (VRF)	Not supported	Not supported	—
Tunnel	Not supported	Not supported	—

Supported Network Resource Management Components for Cisco Catalyst 4500 Series Switches

The following Network Resource Management components support Cisco Catalyst 4500 Series Switches:

- [Supported Protocols for Configuration Archive, page 105](#)
- [Supported Protocols for Network Element Image Management, page 105](#)

Supported Protocols for Configuration Archive

Table 114 *Supported Protocols for Configuration Archive for Cisco Catalyst 4500 Series*

Functionality	SNMP	Telnet
When request is from VNE		
Fetching running configuration	No	Yes
Fetching running configuration timestamp	Yes	No
Fetching startup configuration timestamp	Yes	No
Fetching VLAN ¹ configuration timestamp	No	Yes
When request is from Configuration Archive application		
Fetching the running and startup configuration	Yes	No
Deploying the running and startup configuration	Yes	No
Fetching the VLAN ¹ configuration	No	Yes
Deploying the VLAN ¹ configuration	No	Yes

1. Supported only for IOS image.

Supported Protocols for Network Element Image Management

Table 115 *Supported Protocols for NEIM for Cisco Catalyst 4500 Series*

Functionality	SNMP	Telnet
Image analysis and verification	Yes	No
Image distribution	Yes	No
Image activation	No	Yes

Cisco Catalyst 6500 Series Switches

This section contains:

- [Supported Network Element for Cisco Catalyst 6500 Series Switches, page 106](#)
- [Supported Software Version for Cisco Catalyst 6500 Series Switches, page 106](#)
- [Supported Modules for Cisco Catalyst 6500 Series Switches, page 106](#)
- [Supported Technologies on Cisco Catalyst 6500 Series Switches, page 109](#)
- [Supported Service Alarms for Cisco 6500 Series, page 110](#)
- [Supported Topologies for Cisco Catalyst 6500 Series Switches, page 111](#)
- [Supported Network Resource Management Components for Cisco Catalyst 6500 Series Switches, page 112](#)

Supported Network Element for Cisco Catalyst 6500 Series Switches

Table 116 *Supported Network Element for Cisco Catalyst 6500 Series Switches*

Device Type	sysObjectID
6506 (Cat OS)	.1.3.6.1.4.1.9.5.45
6506 (IOS)	.1.3.6.1.4.1.9.1.282
6509 (Cat OS)	.1.3.6.1.4.1.9.5.44
6509 (IOS)	.1.3.6.1.4.1.9.1.283
6509-NEB (Cat OS)	.1.3.6.1.4.1.9.5.47
6509-NEB (IOS)	.1.3.6.1.4.1.9.1.310
6509-NEB-A (Cat OS)	.1.3.6.1.4.1.9.5.61
6509-NEB-A (IOS)	.1.3.6.1.4.1.9.1.534

Supported Software Version for Cisco Catalyst 6500 Series Switches

Table 117 *Supported Software Version for Cisco Catalyst 6500 Series Switches*

Software Version	Support Available In
CatOS 6.4(10)	Cisco ANA 4.0 and later
CatOS 8.3(4)	Cisco ANA 4.0 and later
12.2(18)SXD	Cisco ANA 4.0 and later
CatOS 7.6(1)	Cisco ANA 4.0 and later
12.2(18)SXF	Cisco ANA 4.0.1 and later
CatOS 7.6(6)	Cisco ANA 4.0.1 and later
12.2(18)SXE	Cisco ANA 4.0.2 and later
12.1(13)E6	Cisco ANA 4.0.2 and later
12.2(33)SXI	Cisco ANA 4.0.2 and later

Supported Modules for Cisco Catalyst 6500 Series Switches

Table 118 *Supported Modules for Cisco Catalyst 6500 Series Switches*

Part Number	Support Available In	Description
7600-ES20-10G3C	Cisco ANA 4.0.2 and later	Cisco 7600 ES20 line card, 2x10GE XFP with DFC 3C
7600-ES20-10G3CXL	Cisco ANA 4.0.2 and later	Cisco 7600 ES20 line card, 2x10GE XFP with DFC 3CXL
7600-ES20-GE3C	Cisco ANA 4.0.2 and later	Cisco 7600 ES20 line card, 20xGE SFP with DFC 3C
7600-ES20-GE3CXL	Cisco ANA 4.0.2 and later	Cisco 7600 ES20 line card, 20xGE SFP with DFC 3CXL
7600-SIP-400	Cisco ANA 4.0 and later	Cisco 7600 Series SPA Interface Processor-400
7600-SIP-600	Cisco ANA 4.0 and later	Cisco 7600 Series SPA Interface Processor-600

Table 118 **Supported Modules for Cisco Catalyst 6500 Series Switches (continued)**

Part Number	Support Available In	Description
ACE20-MOD-K9	Cisco ANA 4.0.2 and later	Application Control Engine 20 Hardware
GLC-BX-D	Cisco ANA 4.0 and later	1000BASE-BX10 SFP module for single-strand SMF, 1490-nm TX/1310-nm RX wavelength
GLC-BX-U	Cisco ANA 4.0 and later	1000BASE-BX10 SFP module for single-strand SMF, 1310-nm TX/1490-nm RX wavelength
GLC-LH-SM	Cisco ANA 4.0 and later	1000BASE-LX/LH SFP transceiver module for MMF and SMF, 1300-nm wavelength
GLC-SX-MM	Cisco ANA 4.0 and later	1000BASE-SX SFP transceiver module for MMF, 850-nm wavelength
GLC-T	Cisco ANA 4.0 and later	1000BASE-T SFP transceiver module for Category 5 copper wire
GLC-ZX-SM	Cisco ANA 4.0 and later	1000BASE-ZX SFP transceiver module for SMF, 1550-nm wavelength
MEM-C6K-CPTFL256M	Cisco ANA 4.0 and later	Cisco Compact Flash Memory Card, 256 MB
MEM-XCEF720-1GB	Cisco ANA 4.0 and later	1GB Cisco DFC3A Memory Upgrade
MEM-XCEF720-256M	Cisco ANA 4.0 and later	Catalyst 6500 256MB DDR
OSM-1OC48-POS-SI+	Cisco ANA 4.0 and later	Enhanced 1-port OC-48/STM-16 SONET/SDH OSM, SM-IR, w/ 4 GE
PWR-4000-DC	Cisco ANA 4.0 and later	4000W DC Power Supply for Cat6509/13 chassis
RSP720-3C-GE	Cisco ANA 4.0.2 and later	Supervisor Engine 720 3C Gigabit Ethernet
RSP720-3CXL-GE	Cisco ANA 4.0.2 and later	Supervisor Engine 720 3CXL Gigabit Ethernet
SPA-10X1GE	Cisco ANA 4.0.2 and later	Cisco 10-Port Gigabit Ethernet Shared Port Adapter
SPA-10X1GE-V2	Cisco ANA 4.0.2 and later	Cisco 10-Port Gigabit Ethernet Shared Port Adapter
SPA-1XOC12-ATM	Cisco ANA 4.0 and later	Cisco 1-Port OC12c/STM4c ATM Shared Port Adapter
SPA-1XOC12-POS	Cisco ANA 4.0 and later	Cisco 1-Port OC-12c/STM-4c POS Shared Port Adapter
SPA-1xTENGE-XFP	Cisco ANA 4.0.2 and later	1-Port 10-Gigabit Ethernet SPA
SPA-24CHT1-CE-ATM	Cisco ANA 4.0.2 and later	24-Port Channelized T1/E1 ATM Cepe SPA
SPA-2XCT3/DS0	Cisco ANA 4.0 and later	Cisco 2-Port Channelized T3 (DS-0) Shared Port Adapter
SPA-2XOC3-ATM	Cisco ANA 4.0 and later	Cisco 2-Port OC3c/STM1c ATM Shared Port Adapter
SPA-2XOC3-POS	Cisco ANA 4.0 and later	Cisco 2-Port OC-3c/STM-1c POS Shared Port Adapter
SPA-4XOC3-ATM	Cisco ANA 4.0 and later	Cisco 4-Port OC3c/STM1c ATM Shared Port Adapter
SPA-5X1GE	Cisco ANA 4.0.2 and later	Cisco 5-Port Gigabit Ethernet Shared Port Adapter
SPA-5X1GE-V2	Cisco ANA 4.0.2 and later	Cisco 5-Port Gigabit Ethernet Shared Port Adapter
SPA-8XCHT1/E1	Cisco ANA 4.0 and later	Cisco 8-Port Channelized T1/E1 SPA
SPA-OC192POS-XFP	Cisco ANA 4.0 and later	Cisco 1-Port OC-192c/STM-64c POS/RPR Shared Port Adapter with XFP Optics
WS-C6509-E-FAN	Cisco ANA 4.0 and later	Catalyst 6509 FAN TRAY
WS-F6700-DFC3A	Cisco ANA 4.0.1 and later	Distributed forwarding daughter card 3A

Table 118 **Supported Modules for Cisco Catalyst 6500 Series Switches (continued)**

Part Number	Support Available In	Description
WS-F6700-DFC3B	Cisco ANA 4.0 and later	Distributed forwarding card for 6700 Series line cards with 256 MB DRAM as default
WS-F6700-DFC3B	Cisco ANA 4.0.1 and later	Distributed forwarding daughter card 3B
WS-F6700-DFC3BXL	Cisco ANA 4.0 and later	Distributed forwarding card for 6700 Series line cards with 1 GB DRAM as default
WS-F6700-DFC-3C	Cisco ANA 4.0.2 and later	WS-F6700 Daughter Feature Card 3C
WS-F6700-DFC3CXL	Cisco ANA 4.0.2 and later	Catalyst 6500 Dist Fwd Card- 3CXL, for WS-X67xx
WS-F6K-MSFC	Cisco ANA 4.0 and later	Multilayer switch feature
WS-F6K-MSFC2	Cisco ANA 4.0 and later	Multilayer switch feature
WS-F6K-MSFC3	Cisco ANA 4.0 and later	Multilayer switch feature
WS-F6K-PFC2	Cisco ANA 4.0 and later	Catalyst 6500 Series PFC 2
WS-F6K-PFC2	Cisco ANA 4.0.1 and later	Policy Feature Card2.
WS-F6K-PFC3A	Cisco ANA 4.0.1 and later	Policy Feature Card3A
WS-F6K-PFC3B	Cisco ANA 4.0 and later	Catalyst 6500 Series Policy Feature Card 3B
WS-F6K-PFC3BXL	Cisco ANA 4.0 and later	Policy Feature Card 3B
WS-SUP32-10GE-3B	Cisco ANA 4.0.2 and later	Cisco Catalyst 6500 Series Supervisor Engine 32 with 2 10 GE uplinks and PFC3B Supervisor Engine 32, two 10-Gigabit Ethernet ports (XENPAK), one 10/100/1000 Mbps port, Policy Feature Card 3B (PFC3B) and MSFC2 daughter cards
WS-SUP32-GE-3B	Cisco ANA 4.0 and later	Catalyst 6500 Supervisor 32 with 8 GE uplinks and PFC3B
WS-SUP32-GE-3B	Cisco ANA 4.0.2 and later	Cisco Catalyst 6500 Series Supervisor Engine 32 with 8 GE uplinks and PFC3B Supervisor Engine 32, nine Gigabit Ethernet uplink ports
WS-SUP720	Cisco ANA 4.0.1 and later	Supervisor Engine 720
WS-SUP720-3B	Cisco ANA 4.0 and later	Catalyst 6500/Cisco 7600 Supervisor 720 Fabric MSFC3 PFC3BXL
WS-SUP720-3BXL	Cisco ANA 4.0 and later	Catalyst 6500/Cisco 7600 Sup 720 Fabric MSFC3 PFC3BXL
WS-SVC-FWM-1-K9	Cisco ANA 4.0 and later	Cisco Firewall Services Module for Cisco Catalyst 6500 and Cisco 7600 Series
WS-SVC-IDS2-BUN-K9	Cisco ANA 4.0 and later	Cisco Catalyst 6500 Series Intrusion Detection System (IDS2) Service Module
WS-X6024-10FL-MT	Cisco ANA 4.0 and later	Catalyst 6000 24-port 10BaseFL MT-RJ Module
WS-X6148-FE-SFP	Cisco ANA 4.0.2 and later	Catalyst 6500 48-port FastE Mod: fabric-enabled
WS-X6182-2PA	Cisco ANA 4.0 and later	Cisco Catalyst 6x00 Flex WAN Module
WS-X6224-100FX-MT	Cisco ANA 4.0.1 and later	100BaseFX MM MT-RJ
WS-X6248A-TEL	Cisco ANA 4.0 and later	Catalyst 6000 48-port 10/100, Enhanced QoS
WS-X6248-RJ-45	Cisco ANA 4.0 and later	10/100BaseTX Ethernet
WS-X6248-TEL	Cisco ANA 4.0 and later	Catalyst 6000 48-port 10/100, Telco
WS-X6324-100FX-MM	Cisco ANA 4.0 and later	Catalyst 6000 24-port 100FX, Enhanced QoS, MT-RJ, MMF
WS-X6348-RJ-45	Cisco ANA 4.0 and later	Cisco Catalyst 6500 48-port 10/100 RJ-45 Module

Table 118 **Supported Modules for Cisco Catalyst 6500 Series Switches (continued)**

Part Number	Support Available In	Description
WS-X6408A-GBIC	Cisco ANA 4.0 and later	Catalyst 6000 8-port Gigabit Ethernet, enhanced QoS (Requires GBICs)
WS-X6408-GBIC	Cisco ANA 4.0 and later	Catalyst 6000 8-port 1000BaseX GBIC
WS-X6416-GBIC	Cisco ANA 4.0 and later	Catalyst 6000 16-port Gigabit Ethernet module
WS-X6516A-GBIC	Cisco ANA 4.0.1 and later	CEF256 Gigabit Ethernet Optical Interface Modules with DFC
WS-X6516-GBIC	Cisco ANA 4.0.1 and later	WS-X6516-GE-TX SFM-capable 16 port 10/100/1000mb RJ45 Rev.
WS-X6548-RJ-45	Cisco ANA 4.0 and later	Fabric-enabled 10/100 Fast Ethernet Modules, RJ-45
WS-X6704-10GE	Cisco ANA 4.0 and later	Cat6500 4-port 10 Gigabit Ethernet Module
WS-X6708-10G-3CXL	Cisco ANA 4.0.2 and later	Catalyst 6500 Dist Fwd Card- 3CXL, for WS-X6708
WS-X6724-SFP	Cisco ANA 4.0 and later	Cisco Catalyst 6500 24-port Mixed Media Gigabit Ethernet Module
WS-X6748-GE-TX	Cisco ANA 4.0 and later	Cat6500 48-port 10/100/1000 GE Mod: fabric enabled, RJ-45
WS-X6748-SFP	Cisco ANA 4.0 and later	Catalyst 6500 48-port GigE Mod: fabric-enabled
WS-X6K-S1A-MSFC2	Cisco ANA 4.0.2 and later	Catalyst 6500 Supervisor Engine-2 U SIA and MSFC2
WS-X6K-S2U-MSFC2	Cisco ANA 4.0 and later	Catalyst 6500 Supervisor Engine-2 U Sup2 and MSFC2
WS-X6K-SUP1A-2GE	Cisco ANA 4.0 and later	Catalyst 6000 Supervisor Engine1A, Enhanced QoS, 2GE
WS-X6K-SUP2-2GE	Cisco ANA 4.0 and later	1000BaseX supervisor

Supported Technologies on Cisco Catalyst 6500 Series Switches

The following technologies are supported:



Note

MPLS scheme is supported only for IOS image.

Technologies	Schemes	Application
ARP	Foundation and MPLS	Cisco ANA 4.0, 4.0.1, and Cisco MPLS-AM 1.0
Bridging	Foundation and MPLS	Cisco ANA 4.0, 4.0.1, and Cisco MPLS-AM 1.0
Ethernet	Foundation and MPLS	Cisco ANA 4.0, 4.0.1, and Cisco MPLS-AM 1.0
Ethernet Channel	Foundation and MPLS	Cisco ANA 4.0, 4.0.1, and Cisco MPLS-AM 1.0
IEEE dot1q	Foundation and MPLS	Cisco ANA 4.0, 4.0.1, and Cisco MPLS-AM 1.0
IP	Foundation and MPLS	Cisco ANA 4.0, 4.0.1, and Cisco MPLS-AM 1.0
ISIS (With IOS image)	Foundation and MPLS	Cisco ANA 4.0, 4.0.1, and Cisco MPLS-AM 1.0
10 Giga Ethernet	Foundation and MPLS	Cisco ANA 4.0, 4.0.1, and Cisco MPLS-AM 1.0
MPLS	Foundation and MPLS	Cisco ANA 4.0, 4.0.1, and Cisco MPLS-AM 1.0
OSPF	Foundation and MPLS	Cisco ANA 4.0, 4.0.1, and Cisco MPLS-AM 1.0
POS	Foundation and MPLS	Cisco ANA 4.0, 4.0.1, and Cisco MPLS-AM 1.0

Technologies	Schemes	Application
MPLS	Foundation and MPLS	Cisco ANA 4.0, 4.0.1, and Cisco MPLS-AM 1.0
COD	MPLS	Cisco MPLS-AM 1.0
MP-BGP	MPLS	Cisco MPLS-AM 1.0
MPLS TE-Tunnel	MPLS	Cisco MPLS-AM 1.0
MPLS Layer 3 VPN	MPLS	Cisco MPLS-AM 1.0
Pseudowire	MPLS	Cisco MPLS-AM 1.0
VRF	MPLS	Cisco MPLS-AM 1.0
Carrier Ethernet	Foundation and MPLS	Cisco ANA 4.0.2
CFM	Foundation and MPLS	Cisco ANA 4.0.2

For detailed support on the technologies, see [Cisco Active Network Abstraction VNE Reference—Addendum](#) on Cisco.com.

Supported Service Alarms for Cisco 6500 Series

Table 119 *Supported Alarms for Cisco 6500 Series*

Technologies	Event Name	Supported	Support Added In	Expedited
Ethernet	Link Down	Yes	Cisco ANA 4.0	No
Ethernet	Port Down	Yes	Cisco ANA 4.0	No
Ethernet	Port Flapping	Yes	Cisco ANA 4.0	No
Ethernet	Interface Status	Yes	Cisco ANA 4.0	No
Physical and Logical Equipment	Component Unreachable	Yes	Cisco ANA 4.0	No
MPLS	MPLS TE Tunnel Down	Yes	Cisco MPLS-AM 1.0	No
MPLS Pseudowire	VC Up/VC Down	Yes	Cisco ANA 4.0.2	No
Base Logical Component	CPU Overutilized	Yes	Cisco ANA 4.0	No
Base Logical Component	Memory Overutilized	Yes	Cisco ANA 4.0	No
Routing Protocols	BGP Neighbor Loss	Yes	Cisco ANA 4.0	No

Supported Topologies for Cisco Catalyst 6500 Series Switches

Table 120 *Supported Topologies for Cisco 6500 Series*

Topology Type	Topology Discovery Technique	Topology Verification Technique	Additional Information
Physical Layer	CDP	CDP	The ports are tested on separate VNEs by checking the VNE management IP. CDP (Cisco Discovery Protocol) includes any upper-layer techniques, such as MAC in Ethernet. In this technique the matching criteria is the CDP neighboring information.
Physical Layer	Static	—	You can create a static link between managed network elements by selecting the two end ports of the network elements. To create a static topological link, select the exact location of the two end ports (at both ends of the link). For information on creating a Static link, see <i>Cisco Active Network Abstraction 4.0.2 User and Administration Guide</i> on Cisco.com: http://www.cisco.com/en/US/products/ps6776/products_user_guide_list.html
Ethernet	MAC address	Ethernet counters	<ul style="list-style-type: none"> • MAC: Ethernet port MAC is determined using bridge and ARP tables. This technique discovers links between routers and links between router and switch. It does not discover links between switches. • Ethernet Counters: Based on the unicast packets traffic signature.
MPLS	IP information	IP information	—
BGP	BGP information	BGP information	BGP information includes the local or remote BGP Identifier and autonomous system.

Table 120 *Supported Topologies for Cisco 6500 Series (continued)*

Topology Type	Topology Discovery Technique	Topology Verification Technique	Additional Information
VPN (VRF)	Route Targets	Route Targets	Each VRF is identified with the set of its import and export route targets. The matching criteria between VRF entities is to have at least one pair of import and export route target of one VRF to export and import route target of the other VRF.
Tunnel	Pseudowire Emulation Edge to Edge (PWE3) Information	PWE3 Information	Each pseudowire is identified by the following criteria: <ol style="list-style-type: none"> 1. Local and remote router IP. 2. Tunnel ID. The matching between pseudowire tunnels Pw1 and Pw2 is done by comparing: <ol style="list-style-type: none"> 1. The Pw1 local IP to Pw2 remote IP and Pw1 remote IP to Pw2 local IP. 2. Tunnel ID

Supported Network Resource Management Components for Cisco Catalyst 6500 Series Switches

The following Network Resource Management components support for Cisco Catalyst 6500 Series Switches:

- [Supported Protocols for Configuration Archive, page 112](#)
- [Supported Protocols for Network Element Image Management, page 113](#)
- [Supported Protocols for Command Builder, page 113](#)

Supported Protocols for Configuration Archive

Table 121 *Supported Protocols for Configuration Archive for Cisco Catalyst 6500 Series*

Functionality	SNMP	Telnet
When request is from VNE		
Fetching running configuration	No	Yes
Fetching running configuration timestamp	Yes	No
Fetching startup configuration timestamp	Yes	No
Fetching VLAN ¹ configuration timestamp	No	Yes
When request is from Configuration Archive application		
Fetching the running and startup configuration	Yes	No
Deploying the running and startup configuration	Yes	No

Table 121 *Supported Protocols for Configuration Archive for Cisco Catalyst 6500 Series*

Functionality	SNMP	Telnet
Fetching the VLAN ¹ configuration	No	Yes
Deploying the VLAN ¹ configuration	No	Yes

1. Supported only for IOS image.

Supported Protocols for Network Element Image Management

Table 122 *Supported Protocols for NEIM for Cisco Catalyst 6500 Series*

Functionality	SNMP	Telnet
Image analysis and verification	Yes	No
Image distribution	Yes	No
Image activation	No	Yes

Supported Protocols for Command Builder

Table 123 *Supported Protocols for Command Builder for Cisco Catalyst 6500 Series*

Description	Interfaces	Transport Protocols Used	Support Available In
Configuring CFM domain	Configuration > Command Builder > Command Browser	Telnet	Cisco ANA 4.0.2
Configuring CFM global Parameters	Configuration > Command Builder > Command Browser	Telnet	Cisco ANA 4.0.2
Configuring CFM MIP	Configuration > Command Builder > Command Browser	Telnet	Cisco ANA 4.0.2
Configuring CFM continuity Check	Configuration > Command Builder > Command Browser	Telnet	Cisco ANA 4.0.2
Configuring CFM service id	Configuration > Command Builder > Command Browser	Telnet	Cisco ANA 4.0.2
Configuring CFM MEP	Configuration > Command Builder > Command Browser	Telnet	Cisco ANA 4.0.2
Enable CFM continuity check	Configuration > Command Builder > Command Browser	Telnet	Cisco ANA 4.0.2
Enable CFM SNMP server traps	Configuration > Command Builder > Command Browser	Telnet	Cisco ANA 4.0.2

Cisco ME 3400 Series Ethernet Access Switches

This section contains:

- [Supported Network Elements for Cisco ME 3400 Series Ethernet Access Switches, page 114](#)
- [Supported Software Versions for Cisco ME 3400 Series Ethernet Access Switches, page 114](#)
- [Supported Modules for Cisco ME 3400 Series Ethernet Access Switches, page 115](#)
- [Supported Technologies on Cisco ME 3400 Series Ethernet Access Switches, page 115](#)
- [Supported Service Alarms for Cisco ME 3400 Series Ethernet Access Switches, page 116](#)
- [Supported Topologies for Cisco ME 3400 Series Ethernet Access Switches, page 117](#)
- [Supported Network Resource Management Components for Cisco ME 3400 Series Ethernet Access Switches, page 118](#)

Supported Network Elements for Cisco ME 3400 Series Ethernet Access Switches

Table 124 *Supported Network Element for Cisco ME 3500 Ethernet Access Switches*

Device Type	sysObjectID
cisco340024TSA	1.3.6.1.4.1.9.1.736
cisco340024TSD	1.3.6.1.4.1.9.1.737
ciscoMe3400g12CsA	1.3.6.1.4.1.9.1.780
ciscoMe3400g12CsD	1.3.6.1.4.1.9.1.781
ciscoMe3400g2csA	1.3.6.1.4.1.9.1.825

Supported Software Versions for Cisco ME 3400 Series Ethernet Access Switches

Table 125 *Supported Software Version for Cisco ME 3400 Series Ethernet Access Switches*

Software Version	Support Available In
12.2(25)SEG ¹	Cisco ANA 4.0.2 and later
12.2(35)SE ²	Cisco ANA 4.0.2 and later
12.2(37)SE	Cisco ANA 4.0.2 and later

1. Tested with 12.2(25)SEG3

2. Tested with 12.2(35)SE5 or 12.2(35)SE1

Supported Modules for Cisco ME 3400 Series Ethernet Access Switches

Table 126 Supported Modules for Cisco ME 3400 Series Ethernet Access Switches

Part Number	Support Available In	Description
GLC-BX-U/D	Cisco ANA 4.0.2 and later	1000BASE-BX-10 U/D bidirectional single fiber
GLC-FE-100BX-U/D	Cisco ANA 4.0.2 and later	100BASE-BX10-U/D SFP for Fast Ethernet SFP Ports
GLC-FE-100FX	Cisco ANA 4.0.2 and later	100BASE-FX SFP for Fast Ethernet SFP Ports
GLC-FE-100LX	Cisco ANA 4.0.2 and later	100BASE-LX10 SFP for Fast Ethernet SFP Ports
GLC-LH-SM	Cisco ANA 4.0.2 and later	1000BASE-LX/LH long-wavelength/long haul
GLC-SX-MM	Cisco ANA 4.0.2 and later	1000BASE-SX short wavelength
GLC-T	Cisco ANA 4.0.2 and later	1000BASE-T
GLC-ZX-SM	Cisco ANA 4.0.2 and later	1000BASE-ZX extended distance

Supported Technologies on Cisco ME 3400 Series Ethernet Access Switches

The following technologies are supported:



Note

MPLS scheme is supported only for IOS images.

Technologies	Schemes	Application
Internet Protocol	Foundation and MPLS	Cisco ANA 4.0.2
Routing Protocols	Foundation and MPLS	Cisco ANA 4.0.2
Ethernet (IEEE 802.3)	Foundation and MPLS	Cisco ANA 4.0.2
Synchronous Optical Network	Foundation and MPLS	Cisco ANA 4.0.2
Multi Protocol Label Switching [MPLS]	Foundation and MPLS	Cisco ANA 4.0.2
Virtual Private Networks [VPNs]	MPLS	Cisco ANA 4.0.2
Physical Equipment	Foundation and MPLS	Cisco ANA 4.0.2
Logical Equipment	Foundation and MPLS	Cisco ANA 4.0.2
Base Logical Component	Foundation and MPLS	Cisco ANA 4.0.2
Images and Configuration	Foundation and MPLS	Cisco ANA 4.0.2
Metro Ethernet	MPLS	Cisco ANA 4.0.2
Carrier Ethernet	Foundation and MPLS	Cisco ANA 4.0.2
CFM	Foundation and MPLS	Cisco ANA 4.0.2

For detailed support on the technologies, see [Cisco Active Network Abstraction VNE Reference—Addendum](#) on Cisco.com.

Supported Service Alarms for Cisco ME 3400 Series Ethernet Access Switches

Table 127 *Supported Alarms for Cisco ME 3400 Series Ethernet Access Switches*

Technologies	Event Name	Supported	Support Added In	Expedited
Ethernet	Link Down	Yes	Cisco ANA 4.0.2	No
Ethernet	Port Down	Yes	Cisco ANA 4.0.2	No
Ethernet	Port Flapping	Yes	Cisco ANA 4.0.2	No
Ethernet	Interface Status	Yes	Cisco ANA 4.0.2	No
Physical and Logical Equipment	Component Unreachable	Yes	Cisco ANA 4.0.2	No
MPLS	MPLS TE Tunnel Down	Yes	Cisco ANA 4.0.2	No
MPLS Pseudowire	VC Up/VC Down	Yes	Cisco ANA 4.0.2	No
Base Logical Component	CPU Overutilized	Yes	Cisco ANA 4.0.2	No
Base Logical Component	Memory Overutilized	Yes	Cisco ANA 4.0.2	No
Routing Protocols	BGP Neighbor Loss	Yes	Cisco ANA 4.0.2	No

Supported Topologies for Cisco ME 3400 Series Ethernet Access Switches

Table 128 *Supported Topologies for Cisco ME 3400 Series Ethernet Access Switches*

Topology Type	Topology Discovery Technique	Topology Verification Technique	Additional Information
Physical Layer	CDP or static	Physical layer counters or CDP or static	<p>By default the physical layer does not have specific techniques for discovery.</p> <p>Special cases are:</p> <ul style="list-style-type: none"> Ports from the same device will not be connected. In Cisco devices, if enabled, CDP will be used. Static topology may be used in the physical layer. <p>CDP (Cisco Discovery Protocol):</p> <p>For Cisco devices if CDP is enabled, the CDP technique has higher priority and it is the only one used for discovery and verification. This include any upper layer techniques such as VC related techniques in ATM or MAC in Ethernet.</p> <p>In this technique the matching criteria is the CDP neighboring information.</p> <p>Physical Layer Counters:</p> <p>Based on the port traffic signature, using Octet based, or Octet and Packet based traffic.</p> <p>You can create a static link between managed network elements by selecting the two end ports of the network elements. To create a static topological link, select the exact location of the two end ports (at both ends of the link).</p> <p>For information on creating a Static link, see <i>Cisco Active Network Abstraction 4.0.2 User and Administration Guide</i> on Cisco.com:</p> <p>http://www.cisco.com/en/US/products/ps6776/products_user_guide_list.html</p>
Ethernet	MAC address	Ethernet counters	<ul style="list-style-type: none"> MAC: Ethernet port MAC is determined using bridge and ARP tables. This technique discovers links between routers and links between router and switch. It does not discover links between switches. Ethernet Counters: Based on the unicast packets traffic signature.
MPLS	IP information	IP information	In this technique, the IP address of this multiple MPLS interfaces are checked to be in the same subnet
BGP	BGP information	BGP information	<p>In this technique the following BGP information is used as matching criteria:</p> <ul style="list-style-type: none"> Local/Remote BGP Identifier Same Autonomous System

Table 128 **Supported Topologies for Cisco ME 3400 Series Ethernet Access Switches (continued)**

Topology Type	Topology Discovery Technique	Topology Verification Technique	Additional Information
VPN (VRF)	Route Targets	Route Targets	<p>In this technique, each VRF is identified with the set of its import and export route targets.</p> <p>The matching criteria between VRF entities is to have at least one pair of import and export route target of one VRF to export and import route target of the other VRF.</p>
PWE (Martini)	PWE3 Information	PWE3 Information	<p>Each pseudowire is identified by the following criteria:</p> <ol style="list-style-type: none"> 1. Local and remote router IP. 2. Tunnel ID. <p>The matching between pseudowire tunnels Pw1 and Pw2 is done by comparing:</p> <ol style="list-style-type: none"> 1. The Pw1 local IP to Pw2 remote IP and Pw1 remote IP to Pw2 local IP. 2. Tunnel ID

Supported Network Resource Management Components for Cisco ME 3400 Series Ethernet Access Switches

The following Network Resource Management components support for Cisco ME 3400 Series Ethernet Access Switches:

- [Supported Protocols for Configuration Archive, page 112](#)
- [Supported Protocols for Network Element Image Management, page 113](#)
- [Supported Protocols for Command Builder, page 113](#)

Supported Protocols for Configuration Archive

Table 129 **Supported Protocols for Configuration Archive for Cisco ME 3400 Series Ethernet Access Switches**

Functionality	SNMP	Telnet
Fetching the running and startup configuration	Yes	Yes
Deploying the running and startup configuration	Yes	Yes
Fetching Running Configuration timestamp	Yes	Yes
Fetching Startup Configuration timestamp	Yes	No
Fetching VLAN Configuration timestamp	No	Yes

Supported Protocols for Network Element Image Management

Table 130 *Supported Protocols for NEIM for Cisco ME 3400 Series Ethernet Access Switches*

Functionality	SNMP	Telnet
Image analysis and verification	No	No
Image distribution	Yes	Yes
Image activation	No	Yes

Supported Protocols for Command Builder

Table 131 *Supported Protocols for Command Builder for Cisco ME 3400 Series Ethernet Access Switches*

Description	Interfaces	Transport Protocols Used	Support Available In
Configuring CFM domain	Configuration > Command Builder > Command Browser	Telnet	Cisco ANA 4.0.2
Configuring CFM global Parameters	Configuration > Command Builder > Command Browser	Telnet	Cisco ANA 4.0.2
Configuring CFM MIP	Configuration > Command Builder > Command Browser	Telnet	Cisco ANA 4.0.2
Configuring CFM continuity Check	Configuration > Command Builder > Command Browser	Telnet	Cisco ANA 4.0.2
Configuring CFM service id	Configuration > Command Builder > Command Browser	Telnet	Cisco ANA 4.0.2
Configuring CFM MEP	Configuration > Command Builder > Command Browser	Telnet	Cisco ANA 4.0.2
Enable CFM continuity check	Configuration > Command Builder > Command Browser	Telnet	Cisco ANA 4.0.2
Enable CFM SNMP server traps	Configuration > Command Builder > Command Browser	Telnet	Cisco ANA 4.0.2

Cisco Catalyst 3750 Metro Series Switches

This section contains:

- [Supported Network Elements for Cisco Catalyst 3750 Metro Series Switches, page 120](#)
- [Supported Software Versions for Cisco Catalyst 3750 Metro Series Switches, page 120](#)
- [Supported Modules for Cisco Catalyst 3750 Metro Series Switches, page 120](#)
- [Supported Technologies on Cisco Catalyst 3750 Metro Series Switches, page 121](#)
- [Supported Service Alarms for Cisco Catalyst 3750 Metro Series Switches, page 122](#)
- [Supported Topologies for Cisco Catalyst 3750 Metro Series Switches, page 123](#)

- Supported Network Resource Management Components for Cisco Catalyst 3750 Metro Series Switches, page 124

Supported Network Elements for Cisco Catalyst 3750 Metro Series Switches

Table 132 Supported Network Element for Cisco ME 3750 Ethernet Access Switches

Device Type	sysObjectID
catalyst375024ME	1.3.6.1.4.1.9.1.574
ciscoMe3400g2csA	1.3.6.1.4.1.9.1.574

Supported Software Versions for Cisco Catalyst 3750 Metro Series Switches

Table 133 Supported Software Version for Cisco Catalyst 3750 Metro Series Switches

Software Version	Support Available In
12.2(25)SEG	Cisco ANA 4.0.2 and later
12.2(25)EY1	Cisco ANA 4.0.2 and later
12.2(25)EY2	Cisco ANA 4.0.2 and later
12.2(25)EY3	Cisco ANA 4.0.2 and later
12.2(25)EY4	Cisco ANA 4.0.2 and later
12.2(35)SE	Cisco ANA 4.0.2 and later
12.2(37)SE	Cisco ANA 4.0.2 and later
12.2(40)SE	Cisco ANA 4.0.2 and later

Supported Modules for Cisco Catalyst 3750 Metro Series Switches

Table 134 Supported Modules for Cisco Catalyst 3750 Metro Series Switches

Part Number	Support Available In	Description
catalyst375024ME	Cisco ANA 4.0.2 and later	Metro Ethernet Catalyst 3750 Module. 24-10/100 + 2 SFP (Small Formfactor Pluggable) ports for downlinks
cevModuleDaughterCard	Cisco ANA 4.0.2 and later	Metro Ethernet 3750DaughterCard
GLC-GE-100FX	Cisco ANA 4.0.2 and later	A version of fast ethernet over optical fiber. It uses two strands of multi-mode optical fiber for receive and transmit. Maximum length is 400 metres for half-duplex connections (to ensure collisions are detected) or 2 kilo metres for full-duplex
GLC-LH-SM	Cisco ANA 4.0.2 and later	A long wavelength for a “long haul” fiber optic cable for a maximum length of 10 kilometers

Table 134 **Supported Modules for Cisco Catalyst 3750 Metro Series Switches (continued)**

Part Number	Support Available In	Description
GLC-SX-MM	Cisco ANA 4.0.2 and later	A short laser wavelength on multimode fiber optic cable for a maximum length of 550 meters
GLC-T	Cisco ANA 4.0.2 and later	A specification for Gigabit Ethernet over copper wire (IEEE Std. 802.3ab). The standard defines 1 Gb/s data transfer over distances of up to 100 meters using four pairs of CAT-5 balanced copper cabling and a 5-level coding scheme.
GLC-ZX-SM	Cisco ANA 4.0.2 and later	An extended wavelength single-mode optical fiber for up to 100 kilometers

Supported Technologies on Cisco Catalyst 3750 Metro Series Switches

The following technologies are supported:



Note

MPLS scheme is supported only for IOS images.

Technologies	Schemes	Application
Internet Protocol	Foundation and MPLS	Cisco ANA 4.0.2
Routing Protocols	Foundation and MPLS	Cisco ANA 4.0.2
Ethernet (IEEE 802.3)	Foundation and MPLS	Cisco ANA 4.0.2
Synchronous Optical Network	Foundation and MPLS	Cisco ANA 4.0.2
Multi Protocol Label Switching [MPLS]	Foundation and MPLS	Cisco ANA 4.0.2
Virtual Private Networks [VPNs]	MPLS	Cisco ANA 4.0.2
Physical Equipment	Foundation and MPLS	Cisco ANA 4.0.2
Logical Equipment	Foundation and MPLS	Cisco ANA 4.0.2
Base Logical Component	Foundation and MPLS	Cisco ANA 4.0.2
Images and Configuration	Foundation and MPLS	Cisco ANA 4.0.2
Metro Ethernet	MPLS	Cisco ANA 4.0.2
Carrier Ethernet	Foundation and MPLS	Cisco ANA 4.0.2
CFM	Foundation and MPLS	Cisco ANA 4.0.2

For detailed support on the technologies, see [Cisco Active Network Abstraction VNE Reference—Addendum](#) on Cisco.com.

Supported Service Alarms for Cisco Catalyst 3750 Metro Series Switches

Table 135 *Supported Alarms for Cisco Catalyst 3750 Metro Series Switches*

Technologies	Event Name	Supported	Support Added In	Expedited
Ethernet	Link Down	Yes	Cisco ANA 4.0.2	No
Ethernet	Port Down	Yes	Cisco ANA 4.0.2	No
Ethernet	Port Flapping	Yes	Cisco ANA 4.0.2	No
Ethernet	Interface Status	Yes	Cisco ANA 4.0.2	No
Physical and Logical Equipment	Component Unreachable	Yes	Cisco ANA 4.0.2	No
MPLS	MPLS TE Tunnel Down	Yes	Cisco ANA 4.0.2	No
MPLS Pseudowire	VC Up/VC Down	Yes	Cisco ANA 4.0.2	No
Base Logical Component	CPU Overutilized	Yes	Cisco ANA 4.0.2	No
Base Logical Component	Memory Overutilized	Yes	Cisco ANA 4.0.2	No
Routing Protocols	BGP Neighbor Loss	Yes	Cisco ANA 4.0.2	No

Supported Topologies for Cisco Catalyst 3750 Metro Series Switches

Table 136 Supported Topologies for Cisco Catalyst 3750 Metro Series Switches

Topology Type	Topology Discovery Technique	Topology Verification Technique	Additional Information
Physical Layer	CDP or static	Physical layer counters or CDP or static	<p>By default the physical layer does not have specific techniques for discovery.</p> <p>Special cases are:</p> <ul style="list-style-type: none"> Ports from the same device will not be connected. In Cisco devices, if enabled, CDP will be used. Static topology may be used in the physical layer. <p>CDP (Cisco Discovery Protocol):</p> <p>For Cisco devices if CDP is enabled, the CDP technique has higher priority and it is the only one used for discovery and verification. This include any upper layer techniques such as VC related techniques in ATM or MAC in Ethernet.</p> <p>In this technique the matching criteria is the CDP neighboring information.</p> <p>Physical Layer Counters:</p> <p>Based on the port traffic signature, using Octet based, or Octet and Packet based traffic.</p> <p>You can create a static link between managed network elements by selecting the two end ports of the network elements. To create a static topological link, select the exact location of the two end ports (at both ends of the link).</p> <p>For information on creating a Static link, see <i>Cisco Active Network Abstraction 4.0.2 User and Administration Guide</i> on Cisco.com:</p> <p>http://www.cisco.com/en/US/products/ps6776/products_user_guide_list.html</p>
Ethernet	MAC address	Ethernet counters	<ul style="list-style-type: none"> MAC: Ethernet port MAC is determined using bridge and ARP tables. This technique discovers links between routers and links between router and switch. It does not discover links between switches. Ethernet Counters: Based on the unicast packets traffic signature.
MPLS	IP information	IP information	In this technique, the IP address of this multiple MPLS interfaces are checked to be in the same subnet
BGP	BGP information	BGP information	<p>In this technique the following BGP information is used as matching criteria:</p> <ul style="list-style-type: none"> Local/Remote BGP Identifier Same Autonomous System

Table 136 **Supported Topologies for Cisco Catalyst 3750 Metro Series Switches (continued)**

Topology Type	Topology Discovery Technique	Topology Verification Technique	Additional Information
VPN (VRF)	Route Targets	Route Targets	<p>In this technique, each VRF is identified with the set of its import and export route targets.</p> <p>The matching criteria between VRF entities is to have at least one pair of import and export route target of one VRF to export and import route target of the other VRF.</p>
PWE (Martini)	PWE3 Information	PWE3 Information	<p>Each pseudowire is identified by the following criteria:</p> <ol style="list-style-type: none"> 1. Local and remote router IP. 2. Tunnel ID. <p>The matching between pseudowire tunnels Pw1 and Pw2 is done by comparing:</p> <ol style="list-style-type: none"> 1. The Pw1 local IP to Pw2 remote IP and Pw1 remote IP to Pw2 local IP. 2. Tunnel ID

Supported Network Resource Management Components for Cisco Catalyst 3750 Metro Series Switches

The following Network Resource Management components support for Cisco Catalyst 3750 Metro Series Switches:

- [Supported Protocols for Configuration Archive, page 124](#)
- [Supported Protocols for Network Element Image Management, page 125](#)
- [Supported Protocols for Command Builder, page 125](#)

Supported Protocols for Configuration Archive

Table 137 **Supported Protocols for Configuration Archive for Cisco Catalyst 3750 Metro Series Switches**

Functionality	SNMP	Telnet
Fetching the running and startup configuration	Yes	Yes
Deploying the running and startup configuration	Yes	Yes
Fetching Running Configuration timestamp	Yes	Yes
Fetching Startup Configuration timestamp	Yes	No
Fetching VLAN Configuration timestamp	No	Yes

Supported Protocols for Network Element Image Management

Table 138 *Supported Protocols for NEIM for Cisco Catalyst 3750 Metro Series Switches*

Functionality	SNMP	Telnet
Image distribution	Yes	Yes
Image activation	No	Yes

Supported Protocols for Command Builder

Table 139 *Supported Protocols for Command Builder for Cisco ME 3400 Series Ethernet Access Switches*

Description	Interfaces	Transport Protocols Used	Support Available In
Configuring CFM domain	Configuration > Command Builder > Command Browser	Telnet	Cisco ANA 4.0.2
Configuring CFM global Parameters	Configuration > Command Builder > Command Browser	Telnet	Cisco ANA 4.0.2
Configuring CFM MIP	Configuration > Command Builder > Command Browser	Telnet	Cisco ANA 4.0.2
Configuring CFM continuity Check	Configuration > Command Builder > Command Browser	Telnet	Cisco ANA 4.0.2
Configuring CFM service id	Configuration > Command Builder > Command Browser	Telnet	Cisco ANA 4.0.2
Configuring CFM MEP	Configuration > Command Builder > Command Browser	Telnet	Cisco ANA 4.0.2
Enable CFM continuity check	Configuration > Command Builder > Command Browser	Telnet	Cisco ANA 4.0.2
Enable CFM SNMP server traps	Configuration > Command Builder > Command Browser	Telnet	Cisco ANA 4.0.2

